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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,830	03/23/2005	Soon Jo Lee	9988.217.00	3733

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EXAMINER	
HECKERT, JASON MARK	

ART UNIT	PAPER NUMBER
1792	

MAIL DATE	DELIVERY MODE
10/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/528,830	LEE ET AL.	
	Examiner	Art Unit	
	JASON HECKERT	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/10/09*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8,10,25 and 26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 8,10,25-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/10/09 have been fully considered but they are not persuasive. Applicant argues that none of the previously presented references teach butt-welding a seam without an overlap. Examiner disagrees. Riegel teaches folding a piece of sheet metal and then joining the opposing sections in a longitudinal direction by welding. This is considered to read on butt-welding. At no point does Riegel state that an overlap is present.

2. Examiner considers any teaching of drum construction in the laundry art to be germane to the instant application. Limiting the device to a dryer does not overcome the previously presented art. Washing machines also possess dryer functionality.

3. Additionally, the new claims are now considered to be ambiguous. It is not clear if the butt-welding causes an overlapping portion, or if the butt-welding prevents an overlapping portion. For example, it is possible to read claim 1 as, "...a cylindrical metal body having a first diameter and a seam without an overlapping portion [caused] by butt-welding…" OR , "a cylindrical metal body having a first diameter and a seam [made by butt welding] without an overlapping portion…" Considering there are two fundamentally different interpretations of the same language, the claim is rendered ambiguous.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 8, 10, and 25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear if the butt-welding causes an overlapping portion, or if the butt-welding prevents an overlapping portion. For example, it is possible to read claim 1 as, "...a cylindrical metal body having a first diameter and a seam without an overlapping portion [caused] by butt-welding…" OR , "a cylindrical metal body having a first diameter and a seam [made by butt welding] without an overlapping portion…" Considering there are two fundamentally different interpretations of the same language, the claim is rendered ambiguous.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 8, 10, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinsson OR Johnson in view of Hoffman and further in view of Riegel. In figure 5, Martinson depicts a cylindrical drum 12 made of stainless steel having reduced parts at opposite ends of the cylindrical body. A folded edge, or bent part, exists on the reduced part as shown below.

8.

9. The reduced part has a continually reduced diameter. Any part of the reduced part can read on "connection part" as it is a very broad limitation. Johnson also shows a drum comprising first and second diameters, with a bent portion (see figure 1). Hoffman discloses the use of hems in sheet metal forming (col. 1 lines 1-40 and figures 4-7). It would have been obvious at the time of the invention to modify Martinsson OR Johnson and include folds on the edges, as disclosed by Hoffman, in order to prevent weak and dangerous edges in the metal. The examiner considers the phrase, "wherein the first diameter is not expanded;" to be a process of making the claimed product. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe 777 F.2d 695, 698, 227 USPQ 964,966 (Fed Cir. 1985) "We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

10. Martinnson and Johnson disclose the structural features of the product claimed, and the process of expansion is not considered to be a patentably distinguishable feature. Martinson discloses that joint pressing (note item 67) and welding (col. 1 line 20) are common in washing machine construction. Furthermore, it is known in the art to press and weld drums during construction. Riegel teaches folding a piece of sheet metal and then joining the opposing sections in a longitudinal direction by welding. This is considered to read on butt-welding. At no point does Riegel state that an overlap is present. It would have been obvious at the time of invention to modify Martinsson OR Johnson in view of Hoffman, as stated above, and use welding techniques and machine pressing, as disclosed by Riegel, as these are well known methods of drum construction.

11. In regards to claims 8 and 10, changes in shape or form have been held to be obvious. *In re Dailey* 149 USPQ 47, 50 (CCPA 1966). Additionally, a change of size is generally recognized as being within the ordinary level of skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). It is well settled that determination of optimum values of cause effective variables, such as these dimensions, is within the skill of one practicing the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980). It has been held that where the general conditions of the claim are disclosed in the prior art, discovering optimum or workable ranges involves only routine skill in the art.

12. Claim 1-5, 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon in view of Martinsson or Hoffman and further in view of Riegel. Yoon discloses a drum with a cylindrical part, reduced parts, vibration reducing bands 40, and beads 32. Yoon

does not disclose bent parts. Martinsson discloses a folded edge, or bent part, existing on a reduced part. Hoffman discloses that hemming edges is well known in sheet metal processing. The claimed elements were known in the prior art and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. The process used to make the drum is not given patentable weight.

13. The combination of Yoon in view of Martinsson or Hoffman discloses all of the structural components of the applicant's invention. However, said prior art is silent as to the methods of drum construction. Martinson discloses that joint pressing (note item 67) and welding (col. 1 line 20) are common in washing machine construction. Furthermore, it is known in the art to press and weld drums during construction. Riegel discloses a drum with a butt welded seam and bead portions formed in the body portion (figure 10, page 1 lines 75-77). It would have been obvious at the time of the invention to modify Yoon in view of Martinsson or Hoffman and include a hemmed edge, as stated above, and further utilize pressing or welding in the construction of the drum as is known in the art by Riegel.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HECKERT whose telephone number is (571)272-2702. The examiner can normally be reached on Mon. to Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/

Supervisory Patent Examiner, Art Unit 1792

JMH